

LISTING OF CLAIMS

1. (Currently Amended): A method of controlling selection of parameters for automatic retransmission in a point-to-multipoint wireless communication link having an upstream portion for communicating data from a plurality of customer premises equipment (CPE) to a base station controller (BSC) and a downstream portion for communicating data from the base station controller to the plurality of customer premises equipment, the method comprising the steps of:

selecting physical and media access control (MAC) parameters for automatic retransmission, the physical and MAC parameters for the downstream portion being selected independently for each customer premises equipment of the plurality of customer premises equipment and physical and MAC parameters for the upstream portion being selected independently for said each customer premises equipment; and

including the physical and MAC parameters in a control section of a frame, the control section for sending control information ~~downstream~~; downstream; and

allocating a first part of the upstream portion as shared and some part of the upstream portion as unshared when there are messages received but not yet acknowledged.

Claim 2 (Canceled).

3. (Previously Presented): The method of claim 1, wherein the physical and MAC parameters are dynamically selected based on previous communication between the base station controller and said each customer premises equipment.

4. (Previously Presented): The method of claim 1, further comprising the step of sending the control section of the frame downstream from the base station controller to the customer premises equipment, whereby the base station controller controls physical and MAC parameters for both upstream and downstream retransmission.

5. (Previously Presented): The method of claim 1, further comprising dynamically and adaptively determining new selected physical and MAC parameters for automatic retransmission, wherein the base station controller determines the new selected physical and MAC parameters in response to conditions of a wireless communication link with said each CPE.

6. (Previously Presented): The method of claim 5, wherein the physical and MAC parameters for automatic retransmission are selected responsive to a number of bytes successfully sent.

Claims 7-11 (Canceled).

12. (Currently Amended): A base station controller capable of communicating with a plurality of customer premises equipment, the base station controller comprising:
a transmitter capable of communicating information downstream to the customer premises equipment;

a receiver capable of receiving upstream information communicated by the customer premises equipment;

a processor capable of executing instructions to control the transmitter and the receiver; and

a memory storing a set of instructions, the memory being coupled to the processor, the set of instructions comprising instructions that, when executed by the processor, cause the processor to

select physical and MAC parameters for automatic retransmission of information between the base station controller and the customer premises equipment, the physical and MAC parameters for downstream retransmission being selected independently for each customer premises equipment of the plurality of customer premises equipment, and physical and MAC parameters for upstream retransmission being selected independently for said each customer premises equipment; ~~and~~

include the physical and MAC parameters in a control section of a frame, the control section being for communicating control information ~~downstream~~; downstream; and

allocate a first part of the upstream information as shared and some part of the upstream information as unshared when there are messages received but not yet acknowledged.

13. (Previously Presented): The base station controller according to claim 12, wherein the instructions that cause the processor to select comprise instructions that, when executed by the processor, cause the processor to select dynamically the physical and MAC parameters for automatic retransmission based on previous communication between the base station controller and said each

customer premises equipment.

14. (Previously Presented): The base station controller according to claim 12, wherein the set of instructions further comprises instructions that, when executed by the processor, cause the processor to direct the transmitter to send the control section of the frame downstream from the base station controller to the customer premises equipment, whereby the base station controller controls the physical and MAC parameters for both upstream and downstream retransmission.

15. (Previously Presented): The base station controller according to claim 12, wherein the set of instructions further comprises instructions that, when executed by the processor, cause the processor to determine dynamically and adaptively new selected physical and MAC parameters for automatic retransmission, wherein the base station controller determines the new selected physical and MAC parameters in response to conditions of a wireless communication link with said each customer premises equipment.

16. (Previously Presented): The base station controller according to claim 15, wherein the instructions that, when executed by the processor, cause the processor to select the physical and MAC parameters for automatic retransmission cause the processor to select the physical and MAC parameters responsive to a number of bytes successfully sent between the base station controller and the customer premises equipment.

17. (Currently Amended): An article of manufacture comprising a memory with a set of instructions stored in the memory, the set of instructions comprising instructions that, when executed by a processor capable of causing receiver and transmitter of a base station controller to communicate with a plurality of customer premises equipment, cause the processor to

select physical and MAC parameters for automatic retransmission of information between the base station controller and the customer premises equipment, the physical and MAC parameters for downstream retransmission from the base station controller to the customer premises equipment being selected independently for each customer premises equipment of the plurality of customer premises equipment, and physical and MAC parameters for upstream retransmission from the customer premises equipment to the base station controller being selected independently for said each customer premises equipment; ~~and~~

include the physical and MAC parameters in a control section of a frame, the control section being for sending control information ~~downstream~~; downstream; and

allocate a first part of upstream information as shared and some part of the upstream information as unshared when there are messages received but not yet acknowledged.

18. (Previously Presented): The article of manufacture according to claim 17, wherein the instructions that cause the processor to select comprise instructions that, when executed by the processor, cause the processor to select dynamically the physical and MAC parameters for automatic retransmission based on previous communication between the base station controller and said each customer premises equipment.

19. (Previously Presented): The article of manufacture according to claim 17, wherein the set of instructions further comprises instructions that, when executed by the processor, cause the processor to direct the transmitter to send the control section of the frame downstream from the base station controller to the customer premises equipment, whereby the base station controller controls the physical and MAC parameters for both upstream and downstream retransmission.

20. (Previously Presented): The article of manufacture according to claim 17, wherein the set of instructions further comprises instructions that, when executed by the processor, cause the processor to determine dynamically and adaptively new selected physical and MAC parameters for automatic retransmission, wherein the base station controller determines the new selected physical and MAC parameters in response to conditions of a wireless communication link with said each customer premises equipment.

21. (Previously Presented): The article of manufacture according to claim 17, wherein the instructions that, when executed by the processor, cause the processor to select the physical and MAC parameters for automatic retransmission cause the processor to select the physical and MAC parameters responsive to a number of bytes successfully sent between the base station controller and the customer premises equipment.

Claims 22-24 (Canceled).